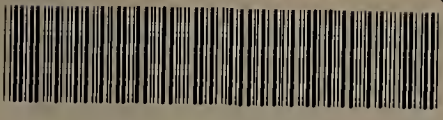


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Commonwealth of Massachusetts
Executive Office of Environmental Affairs

DEP **Department of Environmental Protection**

William F. Weld
Governor
Trudy Coxe
Secretary, EOE
David B. Struhs
Commissioner

GOVERNMENT DOCUMENT
COLLECTION

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Summer 1995

Dear Citizen:

Thank you for your inquiry about the recent revisions to Title 5 of the State Environmental Code. I hope this information package will answer most of your questions.

Initial revisions to Title 5 — representing the first major changes to our state's clean water rules in 17 years — took effect on March 31, 1995. As happens any time a longstanding program undergoes significant change, there was a certain degree of confusion in the beginning and it became clear that certain elements of the new Title 5 needed revision. In response, the Weld Administration recently implemented a series of key enhancements intended to lessen financial impacts on homeowners while retaining strong environmental safeguards.

The enclosed fact sheets, presented in question-and-answer format, reflect all of these recent changes. We hope you will find these materials both informative and helpful.

Should you have additional questions after reviewing this information package, please feel free to contact your local Board of Health, the DEP regional office that serves your part of the state (see the maps and community listings enclosed) or DEP's Title 5 Hotline at 1-800-266-1122.

Sincerely,

Dean Spencer
Acting Director
DEP Division of Water Pollution Control

enclosures



Commonwealth of Massachusetts
Executive Office of Environmental Affairs

Department of Environmental Protection

William F. Weld
Governor
Trudy Coxo
Secretary, EOE
David B. Struhs
Commissioner

Revised 8/16/95
Number 1

Title 5 Q&A:

General Information

Q. When did the new rules go into effect?

A. The section of the rules dealing with approval of alternative technologies went into effect on November 10, 1994. All other provisions took effect March 31, 1995; except for the requirement for the use of an approved Soil Evaluator, which will become effective January 1, 1996. In addition, a number of revisions were made to some of the regulations on August 2, 1995.

Q. Who regulates cesspools and septic systems?

A. Local Boards of Health are the primary regulatory authorities. However, DEP will be involved in a limited number of approvals (for instance, general use of alternative technologies, shared systems and large systems) and some variance requests. In addition, DEP is responsible for overseeing local implementation of Title 5 and provides those bodies with training and technical assistance.

Q. What is the difference between a cesspool and a septic system?

A. A cesspool generally consists of a pipe, running from a building, which empties into a single component pit. This arrangement does not allow proper detention of solids or proper distribution of effluent. As a result, effluent overloads the capacity of the soil to remove harmful bacteria and viruses, to remove phosphorous, and to convert ammonia. A conventional system, on the other hand, is comprised of: a building sewer; a septic tank, where solids can settle and both the solids and effluent begin to degrade; distribution lines, which prevent effluent from overloading the soil; a soil absorption system, which further treats the effluent by removing harmful bacteria, viruses, phosphorous, and nitrogen; and a reserve area.

Q. Do the new rules require every cesspool to be replaced?

A. No. Only those cesspools that exhibit

signs of hydraulic failure, are located extremely close to private or public water supplies or otherwise fail to protect or pose a threat to public health, safety or the environment will need to be upgraded.

Q. Do the new rules require my system to be inspected?

A. The new rules require systems to be inspected at the time of transfer of property, change of use, or expansion. In addition, condominiums must be inspected at the time of transfer unless the system has been inspected within the previous three years; shared systems must be inspected annually and large systems by July 1, 1996 and then once every three years. When facilities are divided or combined, inspection is also required. Systems located in cities and towns with comprehensive inspection programs which have been approved by DEP will be required to comply with those local programs rather than the inspection at transfer requirement.

Q. Who conducts a system inspection?

A. Massachusetts Registered Professional Engineers with a concentration in civil, sanitary or environmental engineering, Massachusetts Registered Sanitarians and Certified Health Officers may perform inspections. Additionally, board of health members and agents, professional home inspectors, licensed septage haulers, system installers, Engineers in Training (EIT certified with a concentration in civil, sanitary or environmental engineering) and

persons with at least one year of experience in system inspection all may conduct inspections, provided that they have attended appropriate training and passed a DEP inspectors' exam. DEP has developed a training course for prospective inspectors and has an inspection form for inspections.

Q. How do I have my system inspected if I am selling the house in the middle of the winter?

A. The regulations require an inspection to be conducted anytime in the two years before the sale, or six months after the sale if weather conditions precluded prior inspection. If, however, the system has been pumped on an annual basis, then the inspection is valid for three years. There may be different requirements if your city or town has a DEP approved inspection program.

Q. What is maximum feasible compliance?

A. The concept of maximum feasible compliance (MFC) is "do the best you can with what you've got." Wherever feasible, a failed or nonconforming system must be upgraded in full compliance with the rules. But if this is not possible, in many instances, the local board of health is authorized to approve an upgrade that brings the system as close to full compliance as possible, in accordance with certain minimum criteria. In those cases, DEP approval would not be needed. Where upgrades are unable to meet basic

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At the meeting of the
Board of Directors
of the
City of New York
held on the 1st day of
January 1870
the following resolution
was adopted:

Resolved, That the
City Engineer be and he
is authorized to

prepare a plan of the
City of New York
showing the location of
the various streets
and the location of
the various buildings
and the location of
the various public
works.

And it is further
resolved, That the
City Engineer be and he
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requirements - for example, minimum groundwater separation (if less than three feet in slow percing soils or less than four feet in fast percing soils) or water supply setbacks (if less than 100 feet from a public water supply or tributary or less than 50 feet from a private water supply), however, variances and DEP review would be required.

Q. What happens if I cannot meet those basic requirements?

A. If you cannot meet certain basic minimum requirements, you generally will have to apply to the local board of health and to DEP for a variance. The new rules provide a number of options. The use of alternative technologies, for example, which provides better treatment than conventional systems might be a solution in many cases without a variance. Installation of a shared system also could be a feasible solution. Other options also may be available and will be considered on a case-by-case basis.

Q. What alternative technologies are available?

A. The new regulations provide that recirculating sand filters are approved for general use and composting/humus toilets are approved for general use in upgrade (remedial) situations. Both uses must be consistent with the conditions in the new Code. In addition, the new Code establishes a comprehensive approach for evaluating and approving other alternative technologies. The Department has issued

two Piloting Use Approvals, three Provisional Use Approvals, six Certifications for General Use and four Remedial Use Approvals for additional alternative technologies. In addition, approvals have been granted to pilot test a number of I/A systems. For more information, contact your local Board of Health.

Q. If I own a vacant lot, can I build on it under the new regulations?

A. Generally, if an individual lot were buildable under the 1978 rules, but a proposed new system could not fully comply with the new rules, you could build up to a three bedroom house, provided that that house size could have been built under the 1978 Code, as long as the application is filed by January 1, 2000, and the system is completed within three years of permit receipt. In some circumstances, a larger house would be allowed, provided that a higher level of treatment (e.g. an RSF) were provided. Longer time frames would apply to certain subdivisions and construction of facilities subject to a M.G.L. c.40B Comprehensive Permit.

Q. Why can't I put my leaching field underneath the driveway?

A. Impervious areas such as driveways or parking lots restrict air passing through the soils. This causes anaerobic conditions, which, in turn, clog the soil absorption system (leaching field) and may cause it to fail.

Q. What happened to existing local rules when the new state regulations took effect?

A. Local rules are adopted under independent legal authority. Existing local rules that conflict with or are less stringent than the new code no longer are in effect. Local rules which are more stringent than the new Code will remain in effect, but boards of health are urged to review them and determine whether they are still appropriate.

Q. Do any government agencies provide financial assistance for repairs and/or upgrades?

A. The federal Farmers Home Administration (FHA) and the Massachusetts Housing Finance Agency (MHFA) offer financing to qualified individuals. For information regarding the federal programs contact your local FHA county office as listed in the phone directory or write:

- Farmers Home Administration
U.S. Department of Agriculture
Washington, DC 20250

For information regarding MHFA programs contact:

- Massachusetts Housing Finance Agency
50 Milk Street
Boston, MA 02109
(617) 854-1000

Under a new state law, the "betterment law," cities and towns in Massachusetts have the option of providing upfront financing of residential system upgrades. The betterment law allows municipalities to create revolving loan funds to pay for upgrades and to recover costs by assessing betterments on the property tax bills of the homeowners who benefit. For costly upgrades, homeowners may be given up to 20 years to reimburse the city or town for costs, plus interest.

The recently enacted state capital budget included \$10 million for the establishment of a program to assist low and moderate income homeowners faced with the prospect of system upgrades. Under this program, grants of up to \$100,000 will be given to provide interested cities and towns with some seed money to establish revolving loan programs under the betterment law. Cities and towns will be prioritized based on such factors as the percentage of unsewered areas and median household income.

The Department has provided boards of health with details about this program. For additional information, you should contact your board of health or the Department at 800/266-1122.

There also are several legislative initiatives under consideration to provide additional monies to communities to help homeowners upgrade their systems.

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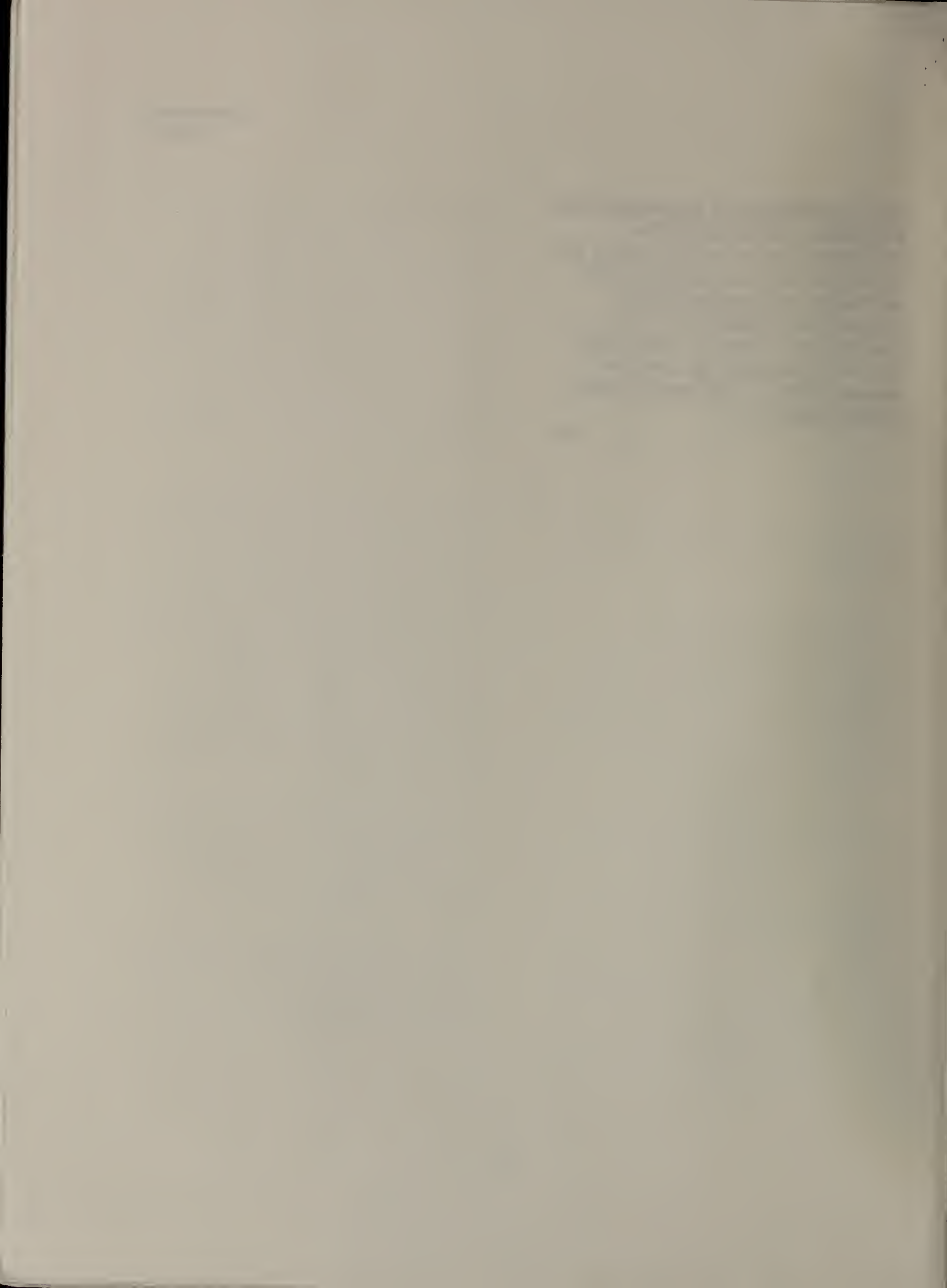
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BUT NOT LIMITED TO, 310 CMR
15.000, TITLE 5, THE REGULATION
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Commonwealth of Massachusetts
Executive Office of Environmental Affairs

Department of Environmental Protection

William F. Weld
Governor

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Secretary, EOE

David B. Struhs
Commissioner

Revised 8/16/95
Number 2

Title 5 Q&A:

System Inspections

Q. What is included in a system inspection?

A. An inspection consists of the collection and recording of the following:

- General layout of the system components;
- Type of use (domestic or commercial/industrial), design flow and whether the facility is presently occupied;
- Analysis of the factors specified in the new Code that indicate system failure, and, for large systems, those indicative of threats to public health and the environment as well;
- Water use records from the previous two years, if available from the public water supplier;
- A description of the septic tank including, for example, condition, approximate age, thickness of

grease/scum layer;

- A characterization of the distribution box and dosing tanks with pumps, if any, such as evidence of solids carryover or backup; and
- The condition of the soil absorption system including, e.g., any signs of hydraulic failure.

When a change in the footprint of a building is proposed, the system inspection only needs to include an assessment of the location of all system components (including the reserve area) unless official records clearly indicate the location.

If an inspection is required, the information is recorded on a DEP-approved inspection form and submitted within 30 days of the inspection, to the approving authority. Boards of Health are the approving authorities for most systems. DEP is the approving authority for state and federal facilities and receives



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inspection forms for large and shared systems. [310 CMR 15.302(2) and 15.301(2)]

If an inspection is not required, a system owner may perform a voluntary assessment of the condition and operability of the system, in which case the results of the inspection are not required to be submitted to the approving authority. [310 CMR 15.301(10)]

Q. When are inspections required?

A. Inspections are required when a facility is to be sold, facilities are divided or combined together, there is a change in use or an expansion of the facility, a routine inspection of a large or shared system is needed, or DEP or the local approving authority orders an inspection. Consult the list below and Title 5 for the specific requirements associated with these situations.

The system must be inspected:

- Within two years (three years if the system has been pumped annually during that time; three years for condominiums) prior to the sale of the facility, or if weather conditions preclude inspection at that time, then within six months after the sale [cities or towns subject to a DEP approved local inspection program may have different requirements - consult the board of health to see if different rules apply],

- When there is a change in use or expansion of the facility which requires a building or occupancy permit. NNote that this does not mean an inspection is required every time a building permit is needed - only when the use of the facility is changed (for example, from residential to commercial) or when a facility is expanded;

- For large systems with a design flow of 10,000 gallons per day or more at full build-out, by July 1, 1996 and every three years thereafter;

- Every year for shared systems;

- When the facility is divided or ownership of two or more facilities is combined; or

- When DEP or the local approving authority orders an inspection. [15.301]

Q. For how long is an inspection valid?

A. Inspections are good for two years. If a facility transfers more than once in the two year period, the single inspection is valid for each transfer. When a system is pumped on an annual basis, an inspection is valid for three years.

Q. Are there exceptions to these requirements?

A. Inspections are not required for new or upgraded systems that have a certificate of

compliance issued within the prior two years of a transfer of title or if the owner or person acquiring title has signed an enforceable agreement with the BOH to upgrade the system or connect to a sanitary sewer or shared system within two years. Additionally, if the facility is subject to a comprehensive DEP approved local inspection program, an inspection is not required prior to transfer of title.

Q. When would a system qualify for a conditional pass?

A. A system with components which need repair or replacement would qualify for a conditional pass on the inspection report. Upon completion of replacement or repair of the broken system component, the system would pass inspection. Examples of such system components eligible for a conditional pass include a metal or cracked septic tank, a broken or obstructed pipe, or an uneven distribution box.

Q. Are there special conditions for condominiums?

A. Yes. The condominium association is responsible for the inspection, maintenance and upgrade of the system or systems serving the association unless the governing documents of the association provide otherwise. Inspection of the system is not required prior to transfer of title if the system has been inspected within the previous three years.

Q. Are there special provisions for large systems?

A. Yes. Large systems are those systems with a design flow of 10,000 gallons per day or more. The content of the inspection remains the same as for smaller systems, but the frequency and the submittal of inspection forms are different. Large systems must be inspected prior to July 1, 1996, and then every three years. The owner and the System Inspector must submit the inspection form to DEP within 30 days of the inspection. (For small systems, the owner and/or operator of the facility must submit the inspection form to the approving authority, which, in most cases, will be the Board of Health.)
[15.301(3)]

Large systems must also be inspected at time of transfer if a routine inspection has not been performed in the previous two years. If the large system is pumped on an annual basis, an inspection is valid for three years.

Q. Do the systems have to be dug up to be inspected?

A. The location and condition of cesspools, septic tanks and distribution boxes must be determined. Often, this will not require extensive excavation. Generally, leaching areas are not required to be dug up. [15.302]

Q. Are the results always reported on the same form?

A. The Title 5 regulations include the requirement to report the results of the inspection and recommendations on a DEP-approved form. Other reports will

not be considered valid by DEP or the local approving authority (Board of Health). The use of a DEP approved form is intended to ensure consistent and thorough review of inspection matters. [15.301(7)]

Q. Are state and federal facilities inspected too?

A. Yes. Title 5 applies to state and federal facilities as well as homes and businesses. DEP is the approving authority for state facilities, so the inspection forms are submitted to DEP and DEP is responsible for enforcing these and other requirements at the state and federal facilities. [15.003]

Q. What happens if all the system components cannot be inspected thoroughly?

A. At a minimum, the septic tank and distribution box if present, or cesspool if present, must be located and inspected. Also, the inspector must make reasonable efforts to locate and identify other components and features. If any component cannot be located or inspected, or if any determination cannot be made, the inspector must state on the inspection form the reasons and the steps taken to complete the inspection. Section 310 CMR 15.302 of Title 5 provides examples of "reasonable efforts." [15.302]

SYSTEM INSPECTORS

Q. Who may be a Title 5 System Inspector and conduct valid inspections?

A. Massachusetts Registered Professional Engineers (PEs) with a concentration in civil, sanitary or environmental engineering, Massachusetts Registered Sanitarians and Certified Health Officers automatically will be considered System Inspectors under the new Title 5.

In addition, the following individuals may become inspectors if they take the DEP-approved course and pass the DEP-approved exam:

- Board of Health members and agents;
- Engineers-in-Training (EIT certified) with a concentration in civil, sanitary or environmental engineering;
- Professional home inspectors;
- Permitted/licensed septage haulers;
- Permitted system installers; and
- Other individuals with a minimum of one year of demonstrated experience in septic system inspection.

System inspections conducted by any other individual will not be considered valid for compliance with Title 5 after March 31, 1995. [15.340(1)(a) and (b)]

Q. I had my house inspected before March 31, 1995, who was able to conduct inspections which will be valid after that date?

A. Massachusetts Registered Professional Engineers (PEs) with a concentration in civil, sanitary, or environmental engineering, Massachusetts Registered Sanitarians and Certified Health Officers could conduct inspections prior to March 31, 1995, which will be considered valid provided:

- (1) The inspector used the DEP approved form, obtainable from DEP offices and Boards of Health; and
- (2) The inspection was consistent with the requirements of the new Code. [15.340(1)(a)]

Q. When will System Inspector training and the exam be given?

A. DEP has developed a course and exam. The first courses were given in February, 1995, with subsequent courses offered on a regular basis. DEP will continue to publicize these courses. The exams have been conducted within two weeks of the close of the courses. Times and locations of future courses and exams will be available shortly.

For updated information on courses and exams, please call 508/756-7281. For other Title 5 information, call the Title 5 hotline at 800/266-1122.

Q. What can I do if my score is below 75 percent and DEP says I failed the exam?

A. You may request a written statement of

the Department's basis for denial. And, you may apply to take the exam again. [15.340(3)]

Q. How can I determine whether someone is a DEP-approved inspector?

A. DEP-approved inspectors who take the course and pass the exam will receive a certificate from DEP identifying them as approved system inspectors. In addition, DEP at least annually will publish a list of these system inspectors. The list will be updated more frequently in the early months of the new regulations. Persons who automatically will be approved as system inspectors may request to be placed on the list as well - i.e. those who do not have to take the DEP approved course and pass the exam: Massachusetts Registered Professional Engineers with a concentration in civil, sanitary or environmental engineering, Massachusetts Registered Sanitarians and Certified Health Officers. These professionals, however, should be able to furnish you with evidence of their professional registrations or certifications.

Q. What does the new Title 5 require once an inspection has been completed?

A. The information must be recorded on a DEP-approved inspection form and submitted, within 30 days of the inspection, to the approving authority. Boards of Health are the approving authorities for most systems. DEP is the approving authority for state and federal facilities. Additionally, for large and shared systems, the new Code provides

that the System Inspector and the owner must submit the inspection form to the Department. In certain circumstances, a copy of the inspection form also must be submitted to the buyer or other person acquiring title to the facility. For smaller systems, the owner and/or operator of the facility is responsible for submitting the inspection form to the approving authority. [15.301(7); 15.301(1)]

Q. How can I obtain DEP approved inspection forms?

A. The forms are available from Boards of Health and the DEP regional and Boston offices. To request a form, call the Title 5 Hotline at (800) 266-1122. Copies of the forms also have been provided to real estate boards and other interested organizations.

Q. Do we always have to use the DEP form, if the information is good enough, who cares?

A. Yes. The new Title 5 includes the requirement to report inspection results and recommendations on a DEP-approved form. Other reports will not be considered valid by DEP or the local approving authority (Board of Health). Use of this form ensures consistent and thorough review of inspection matters. [15.340(7)]

Q. Can the approval of system inspectors be taken away?

A. Yes. DEP may revoke or suspend the approval of a System Inspector when it determines that an inspector has falsified

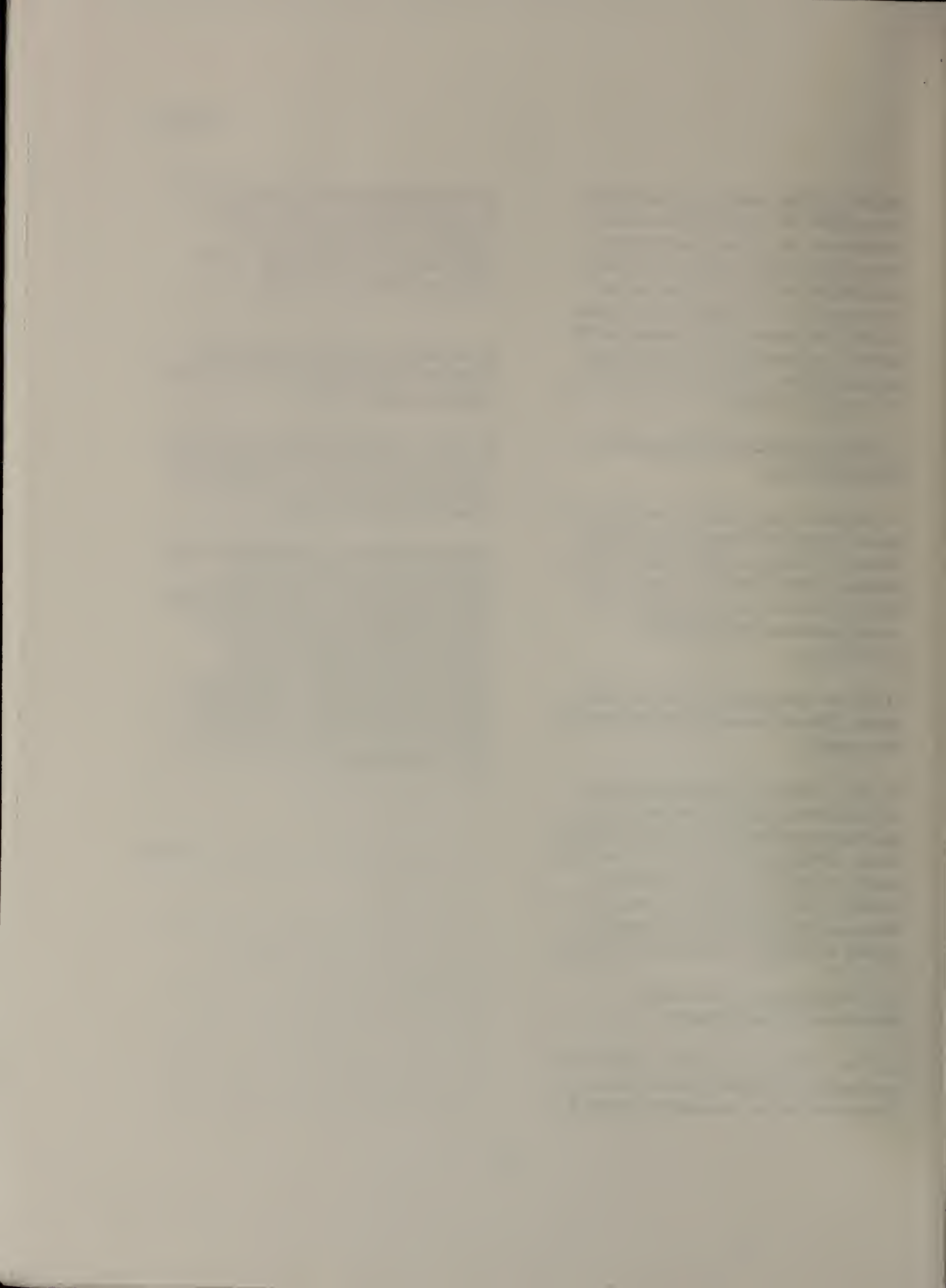
or fraudulently altered an inspection form or misrepresented the results of an inspection. The inspector has an opportunity for a hearing prior to DEP taking this action. [15.340(5)]

Q. Is there a conflict if the system inspector works for the Board of Health and the system owner?

A. Yes. A System Inspector may not act as an agent of the Board of Health and also as the Inspector for a system owner regarding the same system.

THIS DOCUMENT IS INTENDED FOR INFORMAL, INFORMATIONAL PURPOSES ONLY. IN THE EVENT OF ANY CONFLICT OR DISCREPANCY BETWEEN THE INFORMATION CONTAINED HEREIN AND ANY REGULATION OR LAW INCLUDING, BUT NOT LIMITED TO, 310 CMR 15.000, TITLE 5, THE REGULATION SHALL PREVAIL.

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Commonwealth of Massachusetts
Executive Office of Environmental Affairs

Department of Environmental Protection

William F. Weld
Governor
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Secretary, EOE
David B. Struhs
Commissioner

Revised 8/16/95
Number 3

Title 5 Q&A:

Property Transfers

Q. When are Title 5 on-site sewage disposal system inspections required?

A. Inspections are required:

- When a facility is to be sold to new owners, or there otherwise is a transfer of title, except between spouses;
- When facilities are divided or combined together;
- When there is a change in use or an expansion of the facility;
- For large systems (10,000 gallons per day or more) or shared systems on a periodic basis; or
- When DEP or the local approving authority orders an inspection.

Inspections are necessary to ensure the proper operation, upgrade and maintenance of on-site sewage disposal systems. The new Code, therefore, requires system

inspections to be done periodically in certain circumstances. Most inspections will occur as a result of property transfers when facilities are sold, divided or combined. In order to provide further guidance to the regulated community, this document is intended to clarify the regulatory intent of the Department.

Q. For how many months is the system inspection "valid"?

A. For most property transfers, the inspection must occur at or within two years prior to the time of transfer. Condominium inspections are valid for three years. If a system has been pumped on an annual basis, then the inspection is valid for three years. If weather conditions prevent inspection at the time of transfer, the inspection must occur as soon as weather permits, but in no event later than six months after the transfer, provided that prior to or at the time of transfer the seller notifies the buyer in writing of the requirements contained at 310 CMR 15.300 through 15.305 for

inspection and upgrade, if necessary.

Q. Is an inspection required in a foreclosure situation?

A. In a foreclosure situation, inspections must occur within two years before or six months after the execution of the memorandum of sale (irrespective of whether the foreclosing institution, the loan guarantor, the loan servicer, an unaffiliated third party, or any combination thereof, is/are executing such memorandum of sale) or delivery of the deed in lieu of foreclosure to the foreclosing institution or the loan servicer. An inspection conducted up to three years before the time of transfer may be used if the inspection report is accompanied by system pumping records demonstrating that the system has been pumped at least once a year during that time. To the extent that foreclosing institutions or loan servicers have contractually allocated responsibility for the inspection to the unaffiliated third party or the loan guarantor acquiring the property within the specified timeframes, such foreclosing institutions or loan servicers will not be responsible for inspection of the system(s). Entities foreclosing on properties are required to notify those who acquire title of the inspection and upgrade requirements contained at 310 CMR 15.300 through 15.305, in writing, prior to or at the time of transfer.

Q. What if the system was inspected and I want to resell the property, do I have to have it inspected again?

A. If an inspection was conducted within the applicable timeframe, the inspection may fulfill the inspection requirement for more than one transfer of title, and need not be repeated. For most properties, inspection must have occurred within two years prior to the transfer (three years when a system has been pumped on an annual basis). For condominiums, however, the system serving a condominium unit needs to be inspected within three years prior to the transfer. No re-inspection is necessary either for subsequent transfer of the same unit, or for transfer of another unit served by the same on-site system, provided that the inspection occurred within three years prior to the subsequent transfer. While some buyers or lending institutions may want inspection of all systems serving the condominium association, the regulations do not require it.

Q. Who must obtain the inspection and who receives the results?

A. Under Title 5, the property owner or facility operator is generally responsible for obtaining an inspection of the system. At the time of transfer of title, however, the parties may contractually allocate responsibility for the inspection provided that such inspection occur within the specified timeframes. An inspection must be conducted by an approved System Inspector. If an inspection is required, s/he must record the inspection results on a DEP-approved inspection form and submit the form, within 30 days of the inspection, to the approving authority.

Boards of Health are the approving authorities for most systems. DEP is the approving authority for state and federal facilities. Also, for large and shared systems, the System Inspector and the owner must submit the inspection form to DEP.

If an inspection is not required, a system owner may perform a voluntary assessment of the condition and operability of the system, in which case the results of the inspection are not required to be submitted to the approving authority.

Q. With property transfers, does the buyer receive a copy of the inspection report, too?

A. A copy of the inspection report must be submitted to the buyer or other person acquiring title to the facility served by the system. The inspection is intended to provide sufficient information to make a determination as to whether or not the system in its current condition is adequate to protect public health and the environment. The inspection, however, is not designed to provide information to demonstrate that the system adequately will serve the use of the new owner.

Q. How does the inspection requirement apply to the following types of property transfers?

A. The following types of transfers, among others, require an inspection within the applicable time frames:

■ **Inheritance by will or intestacy** (without a will) - with the exception of inheritance by a spouse which would not require an inspection, inspection of the system must occur within two years before or 1 year after the will being allowed by the probate court and the appointment of the executor or within two years before or 1 year after the appointment of an administrator if the deceased dies intestate regardless of whether the property passes specifically or as part of the residue of the estate. An inspection conducted up to three years before the time of transfer may be used if the inspection report is accompanied by system pumping records demonstrating that the system has been pumped at least once a year during that time. Executors or administrators are required to notify, in writing, those who acquire title to real property from an estate of the inspection and upgrade requirements contained at 310 CMR 15.300 through 15.305.

■ **Legal life estate or an interest for life in trust** - inspection of the system must occur within two years before or six months of the death of the life tenant. If a successive life interest passes to a spouse, the inspection must occur within two years of the death of the last surviving spouse. An inspection conducted up to three years before the time of transfer may be used if

the inspection report is accompanied by system pumping records demonstrating that the system has been pumped at least once a year during that time.

- **Inter-family transfers where new parties are involved** (e.g. parents deed property to children) - within two years prior to transfer or if weather conditions prevent inspection at the time of transfer, the inspection must occur as soon as weather permits, but in no event later than six months after the transfer. An inspection conducted up to three years before the time of transfer may be used if the inspection report is accompanied by system pumping records demonstrating that the system has been pumped at least once a year during that time.
- **Foreclosure or deeds in lieu of foreclosure** - (see the Answer to Question 3 above).
- **Tax taking either by the federal, state, or municipal government** - Inspection of the system must occur within two years prior to transfer by governmental entity to buyer or within six months after the expiration of the right of redemption, provided that the governmental entity notifies the buyer in writing of the requirements contained at 310 CMR 15.300 through 15.305 for

inspection and upgrade, if necessary. An inspection conducted up to three years before the time of transfer may be used if the inspection report is accompanied by system pumping records demonstrating that the system has been pumped at least once a year during that time.

- **Levy of execution that results in a conveyance of property** - Inspection of the system must occur within two years prior to transfer by debtor to buyer or within six months after the expiration of the right of redemption, provided that the debtor notifies the buyer in writing of the requirements contained at 310 CMR 15.300 through 15.305 for inspection and upgrade, if necessary. An inspection conducted up to three years before the time of transfer may be used if the inspection report is accompanied by system pumping records demonstrating that the system has been pumped at least once a year during that time.
- **Bankruptcy** - Inspection of the system must occur within two years prior to transfer by bankruptcy trustee to buyer or within six months after the transfer, provided that the debtor notifies the buyer in writing of the requirements contained at 310 CMR 15.300 through 15.305 for inspection and upgrade, if necessary. An

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inspection conducted up to three years before the time of transfer may be used if the inspection report is accompanied by system pumping records demonstrating that the system has been pumped at least once a year during that time.

- **A change in ownership or the form of ownership where NEW parties are introduced** (e.g., introduction of new beneficiary/ies in a nominee trust; introduction of new joint tenant(s) or new tenant(s) in common; introduction of new parties where property is transferring from joint ownership to nominee or business trust, or where a new general partner is introduced; creation of a legal life estate or an interest for life in trust for a party other than the creator or his or her spouse, etc.) - Inspection of the system must occur within two years prior to transfer or if weather conditions prevent inspection at the time of transfer, the inspection must occur as soon as weather permits, but in no event later than six months after the transfer, provided that the new party is notified in writing of the requirements contained at 310 CMR 15.300 through 15.305 for inspection and upgrade, if necessary. In a nominee trust situation, whoever has authority to add a new beneficiary is responsible for the inspection. Trustees in the nominee trust

situation are advised to notify those with authority of their inspection obligation. An inspection conducted up to three years before the time of transfer may be used if the inspection report is accompanied by system pumping records demonstrating that the system has been pumped at least once a year during that time.

NOTE: An exception to this general rule that an inspection is required where new parties are introduced is the situation where a transfer occurs between spouses during life, out right or in trust, in which case an inspection is NOT required. Examples of such spousal transfers which do NOT trigger an inspection include: (1) a spouse transfers the real property to the other spouse, individually, or into a trust of which the other spouse is the sole or primary beneficiary; or (2) a spouse transfers the real property to him/herself and the other spouse, as joint tenants, tenants in common, or as tenants by the entirety.

- **Sale of a condominium unit** (the system serving the particular unit must be inspected) - within three years prior to transfer or if weather conditions prevent inspection at the time of transfer, the inspection must occur as soon as weather permits, but in no event later than six months after the transfer,

provided that the buyer is notified in writing of the requirements contained at 310 CMR 15.300 through 15.305 for inspection and upgrade, if necessary.

Q. How does the inspection requirement apply to the following types of property transfers?

A. The following types of transfers do NOT require an inspection:

- **Refinancing a mortgage or similar instrument, whether or not the identity of the lender remains the same**
- **Taking of a security interest in a property including, but not limited to, issuance of a mortgage**
- **Appointment of, or a change in, a guardian, conservator, or trustee**
- **A change in the form of ownership among the same owners, such as placing the facility within a family trust of which the owners are the sole, present beneficiaries, or changing the proportionate interests among a group of owners or beneficiaries**
- **Adding or deleting a spouse as an owner or beneficiary; or a transfer between spouses during life, out right or in trust; or the death of a spouse;**
- **Any other change in ownership or the form of ownership where NO NEW parties are introduced (e.g., from spouses jointly or as tenants by the entirety to one spouse either for estate planning purposes or pursuant to a divorce settlement or court order, from joint ownership to nominee or business trust, or into limited or general partnership, etc.)**
- **Transfer within two years of issuance of Certificate of Compliance - this includes systems constructed or upgraded prior to March 31, 1995**
- **Owner of the facility or person acquiring title has signed an enforceable agreement with the approving authority to upgrade the system or to connect the facility to a sanitary sewer or a shared system within the next two years following the transfer of title, provided that such agreement has been disclosed to and is binding on the subsequent owner(s)**
- **Facility is subject to a comprehensive local plan of on-site septic system inspection approved in writing by the Department and administered by a local or regional governmental entity; and the system has been**

inspected at the most recent time
required by the plan

**Q. When do large and shared systems
need to be inspected?**

A. Shared systems must be inspected
annually. Large systems, that is, systems
with a design flow of 10,000 gallons per
day or more at full buildout, must be
inspected by July 1, 1996, and then
reinspected once every three years.

**Q. What is required in connection with
changes of use and expansions?**

A. A system must be inspected upon any
change in use or expansion of use (if the
expansion of use results in an increase in
flow to the system such as adding a
bedroom) of the facility served if a
building permit or occupancy permit from
the local building inspector is required for
such change in use or expansion. Any
change in the footprint of a building will
also require an inspection to determine the
location of the system to ensure that
construction will not be placed upon any
system components or on the reserve area
of the system, unless official records are
available to determine the location of the
system components.

**Q. Is an inspection required in the
context of new construction?**

A. Issuance of a Certificate of Compliance
by the approving authority (generally the
Board of Health, the Department in the
case of state and federal facilities) upon

completion of the system in new
construction satisfies the inspection
requirement. Certificates of Compliance
issued in the expansion or upgrade
contexts will also satisfy the inspection
requirement. Issuance of such certificates
of compliance shall satisfy any
requirement for inspection for a period of
two years.

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15.000, TITLE 5, THE REGULATION
SHALL PREVAIL.***

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Commonwealth of Massachusetts
Executive Office of Environmental Affairs

Department of Environmental Protection

William F. Weld
Governor

Trudy Coxe
Secretary, EOE

David B. Struhs
Commissioner

Revised 8/16/95
Number 4

Title 5 Q&A:

Soil Evaluators and Perc Tests

Q. a) Who may become a DEP approved Soil Evaluator? b) How does someone become a DEP approved Soil Evaluator - will an application to DEP be necessary? c) When will the next soil evaluator course and exam be given?

the names and addresses of those individuals who passed the exam. DEP approved the individuals on the list as Soil Evaluators and sent each an approval certificate. The same process will be followed for the next exams.

A. a) Persons meeting the following criteria will qualify to take the DEP approved soil evaluator exam and those who pass the exam may be approved as Soil Evaluators: Massachusetts Registered Sanitarians, Massachusetts Registered Professional Engineers, Engineers in Training, Massachusetts Registered Land Surveyors, Certified Health Officers, Board of Health Members and Agents, and employees of the Department involved in the administration of 310 CMR 15.000. (See 310 CMR 15.017.)

c) The next series of soil evaluator courses and exams will be announced shortly. Anyone who contacts the DEP Training Center, Route 20, Millbury, Massachusetts 01527, telephone 508/752-8648, will be sent an application when they become available. Anyone interested in taking just the exam may apply at that time as well.

b) UMass, DEP's agent that has administered the soil evaluator examinations, was responsible for confirming that exam registrants were qualified to take the exam, scoring the exam and then submitting to DEP a list of

Q. Will the Soil Evaluator be responsible for performing the evaluation of all site conditions required by the Code in 310 CMR 15.100 through 15.107?

A. No. The Soil Evaluator will be responsible for performing or observing the deep observation hole test and determining the soil profile as required by 310 CMR 15.103 and in accordance with

310 CMR 15.018. A Soil Evaluator is also qualified to perform percolation tests, but other qualified professionals may do the perc test portion of the site evaluation, as well. A Soil Evaluator will not be required for completion of the other site evaluation requirements in the Code e.g. landscape position, meeting the necessary setbacks, hydrogeologic properties. These other siting considerations are the responsibility of the person qualified to do the system design.

Q. Has the Soil Evaluator requirement been changed?

A. Yes. The effective date for this portion of the regulations has been changed from October 1, 1995, to January 1, 1996. Other than this change, all other requirements remain the same.

Q. Will the soil profile required by 310 CMR 15.103 need to be completed and a Soil Evaluator used for disposal works construction or system permit applications filed: a) before March 31, 1995; b) on or after March 31, 1995, but prior to January 1, 1996; and c) on or after January 1, 1996?

A. a) For applications filed prior to March 31, 1995, the Soil Evaluator requirements of 310 CMR 15.018 and 310 CMR 15.100(2) and the Soil Profile requirements in 310 CMR 15.103 will not apply.

b) For the vast majority of applications filed on or after March 31, 1995, but prior to January 1, 1996, a soil profile must be

submitted, but the requirement to use a Soil Evaluator will not apply.* If the applicant uses a Soil Evaluator to complete the soil profile in accordance with sections 310 CMR 15.103, 310 CMR 15.100(2) and 310 CMR 15.018 of the new Code, then the system may be designed and approved based on the effluent loading rates applicable to the particular textural class and percolation ("perc") rate of the soil, as set forth in the effluent loading rate table in section 310 CMR 15.242 of the new Code.

For applications filed prior to January 1, 1996, for proposed systems for which a Soil Evaluator is not used, the system will have to be designed and approved in accordance with the most conservative effluent loading rates applicable to the perc rate of the soil, as set forth in the effluent loading rate table, 310 CMR 15.242.*

This would mean that if a Soil Evaluator was not used: 1) where the perc rate is 10 minutes per inch or less, the effluent loading rate would be 0.60 gallons per day per square foot (gpd/sq ft); 2) where the perc rate is 15 or the effluent loading rate would be 0.37 gpd/sq ft; 3) where the perc rate is 20, the effluent loading rate would be 0.34 gpd/sq ft; where the perc rate is 25, the effluent loading rate would be 0.33 gpd/sq ft; and 4) where the perc rate is 30, the effluent loading rate would be 0.29 gpd/sq ft. For perc rates equal to or faster than 2 minutes/in., the Department will allow the use of the Class I loading rate = 0.74 gpd/sq.ft. Soil mottling cannot be used to determine maximum ground water elevation unless a Soil Evaluator conducts the soil evaluation.

c) For the vast majority of applications filed on or after January 1, 1996, an approved Soil Evaluator must complete the soil profile in accordance with sections 310 CMR 15.018, 15.103 and 15.100(2) of the new Code.* Deep hole observation tests conducted before January 1, 1996, will not be considered valid for applications filed on or after that date unless witnessed by a Soil Evaluator.

Q. Who will hire the Soil Evaluator - for whom will the Soil Evaluator be working?

A. DEP anticipates that in most cases, the Soil Evaluator will be a Board of Health Member or Agent in which case, s/he would be working for the Board. As the new Code specifies in Section 310 CMR 15.018, the Board of Health may assess the applicant a fee for this service. Alternatively, the Soil Evaluator may be hired directly by the system proponent. In this case, however, the Soil Evaluator must not be a Member or Agent of the Board of Health that would be the approving authority for the system. Also in this case, the Soil Evaluator would be required to perform the soil evaluation in the presence of the approving authority. Another option is that the Soil Evaluator would not be a Board of Health Member or Agent, but would be a person retained by the Board to perform soil evaluations. This would occur, for example,

subdivisions endorsed after January 1, 1992) filed after March 31, 1995 must be reviewed and approved pursuant to the requirements of the 1978 Code, unless the applicant chooses to apply the requirements of the new Code. when a Board does not have a Member or Agent who is a Soil Evaluator. In this case, the Board would pay the evaluator and then could charge a fee to the system proponent for the service. Accordingly, the Soil Evaluator would be acting as an agent of the Board and not an agent of the applicant.

Q. Who may perform percolation tests?

A. The new Code provides that percolation tests "shall be performed by a Massachusetts Registered Professional Engineer, Massachusetts Registered Sanitarian, a Soil Evaluator, or a person who: in the opinion of the approving authority is qualified to perform such tests; 2) has one year of documented experience in satisfactorily performing such tests; and 3) has used or gained skills that demonstrate sufficient competence to perform such tests. All percolation testing shall be performed in the presence of an authorized representative of the approving authority." (See 310 CMR 15.104(3).)

Q. May a Soil Evaluator, as a member of the Board of Health, complete the soil profile and then conduct the percolation tests for the applicant - or would this present a conflict?

A. The Board of Health Soil Evaluator may perform both a percolation test and

*Under the transition provisions of the new Code, a small number of applications (e.g. for proposed facilities under certain 40B Comprehensive Permits and

the soil evaluation for a site as long as s/he is not directly paid by the system proponent. In this situation, the Board of Health may charge the system proponent a fee for performing these services. The Board of Health Soil Evaluator may not, however, conduct the soil evaluation for the Board of Health and then perform the percolation test as an agent of the site owner. That is, the Soil Evaluator may not act as an agent for both the Board of Health and the system proponent for work done on the same site.

Q. If a Soil Evaluator who is a Board of Health Member performs percolation tests, must another member of the Board be present?

A. As long as the Board of Health Member is not working for or is not being paid directly by the system proponent, no, the presence of another Board of Health Member is not required.

Q. a) Will a percolation test that was performed in compliance with the 1978 Code and prior to March 31, 1995, be valid under the new Code? b) Will a percolation test performed in compliance with the 1978 Code and prior to January 1, 1996, be valid under the new Code?

A. a) & b) If a percolation test was performed prior to March 31, 1995, and the test complies with the requirements of the new Code, then the test may be used in connection with an application for a disposal system construction permit filed on or after March 31, 1995. It is expected that many of the recent perc tests done

under the 1978 Code will remain valid under the new Code.

Q. a) Will a deep observation hole test that was performed prior to March 31, 1995, be valid under the new Code? b) Will a deep observation hole test performed prior to January 1, 1996, be valid under the new Code?

A. a) If a deep observation hole test was performed prior to March 31, 1995, the test may be used in connection with an application for a Disposal System Construction permit filed on or after March 31, 1995, but before January 1, 1996, even if a Soil Evaluator was not present.

b.) For an application filed after January 1, 1996, the deep hole test will be valid only if performed in the presence of a Soil Evaluator (and in compliance with the other requirements of the new Code).

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Commonwealth of Massachusetts
Executive Office of Environmental Affairs

Department of Environmental Protection

William F. Weld
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Trudy Coxe
Secretary, EOE

David B. Struhs
Commissioner

Revised 8/16/95
Number 5

Title 5 Q&A:

Alternative Systems

Q. What is an alternative Title 5 system?

A. An alternative system is any on-site sewage disposal system or portion of a system that is not designed or constructed in a manner consistent with a conventional Title 5 system. A conventional system has a septic tank, a distribution box or dosing mechanism, a soil absorption system and a reserve area. Alternative systems are proposed as alternatives to conventional systems and may provide equal or superior performance to that of conventional systems. Some examples are recirculating sand filters, Wisconsin mounds, peat filters, humus/composting toilets and intermittent sand filters.

[15.002, 15.281]

Q. Are there any alternative systems being used right now?

A. Yes. Recirculating sand filters and humus/composting toilets have been approved for general use, subject to certain conditions in the new Code.

Currently, there are several recirculating sand filters and humus/composting toilets used in this state. The Wisconsin mound, Ruck system, peat filter, intermittent sand filter, Geo-Flow, FAST system, Cromaglass, Clivus Multrum Composter, Bioclere filter, Atlas grease recovery, Infiltrator, Zabel filters, and the OSL effluent filter have been approved for use on individual sites. Additionally, DEP has issued two Piloting Use Approvals, three Provisional Use Approvals, six Certifications for General Use and four Remedial Use Approvals of alternative systems. For further information about these systems, please contact the DEP Regional or Boston Offices listed below or your Board of Health.

Q. Do alternative systems work?

A. Yes, alternative systems typically perform successfully when they are designed and constructed for use according to the designer's and/or manufacturer's recommendations and in accordance with DEP approval. To decrease the risk

associated with non-conventional systems, the new Code establishes a three-tier evaluation system to identify and approve promising technologies for field testing, and, if they prove effective, ultimately for general use in Massachusetts. Under "piloting" and "provisional" approvals, systems are evaluated through close monitoring and careful site selection. Effective systems may obtain "general use" approval, with the terms of the approval including operation, maintenance or other appropriate requirements.

Q. What happens when they break down or fail?

A. As with a conventional system, the owner must either repair or replace the failed system. A full range of options are possible: repair with the same technology, use of another alternative system or installation of a conventional Title 5 system. In some instances, manufacturer warranties may apply. The Board of Health or the Department may order interim measures for health and safety reasons. Until an alternative system is approved for "general use," it may be installed only to remedy a failed or nonconforming system, or for new construction where a Title 5 system or other alternative approved for general use can be installed or where a sewer is accessible.

Q. What is this three-tier process?

A. The new Title 5 establishes a three-tiered review and approval process for alternative systems as follows:

Piloting, the first level, is intended to demonstrate that the technology proposed can provide a level of environmental protection at least equal to that of a conventional Title 5 system. The evaluation essentially is technical. The Department may approve no more than 15 facilities at which piloting of any one particular system may occur.

Provisional Approval, the second level, is intended to evaluate alternative systems that appear technically capable of providing levels of protection at least equivalent to those of standard systems and to determine whether, under actual field conditions in Massachusetts with broader usage than a controlled pilot setting, unrestricted use of the alternative system is likely to provide such protection, and whether any additional conditions addressing long-term operation, maintenance and/or monitoring are necessary to ensure such protection. This evaluation is largely practical - how will the system work when used by the general public.

General Use Certification, the final level, is intended to facilitate and allow the use, under appropriate conditions, of an alternative system that has shown a level of environmental protection at least equivalent to that of a standard system.

If performance data from other jurisdictions is available, the alternative system may enter this process at any tier. It is not necessary to go through all three tiers. [15.280 - 15.289]

Q. How can I get an alternative system to remedy a failed or nonconforming system??

A. An alternative system that has received a general use certification, provisional use, or piloting approval can be used in remedial situations if the conditions of the approval are met. In addition, any individual, business or other entity desiring to install an alternative system must obtain review and certain findings from the Board of Health and then DEP approval. This approval for remedial use may be site specific only, or for potential installation at more sites; data to support likely effectiveness of the system is necessary. DEP has issued several remedial use approvals for widespread use. [15.003 and 15.248]

Q. I am proposing the use of a recirculating sand filter (RSF) designed in accordance with the Department's guidance. Do I have to apply to the Department?

A. Use of an RSF for a system with less than 2,000 gpd of flow designed in accordance with the Department's guidelines and when added to an otherwise fully complying Title 5 system does not require DEP review. In addition, RSFs may be used to upgrade or repair failed systems under many circumstances without DEP approval, even if a fully complying Title 5 system is not feasible on that lot.

Prior to the use of a recirculating sand filter (RSF) for a system between 2,000 to 10,000 gpd in Nitrogen Sensitive Areas

(15.202), the applicant must submit to the Department the written approval of the local approving authority, together with a copy of the complete application that was submitted to the local approving authority (the Board of Health). If the Department does not respond within 60 days, the application is deemed approved. [15.202]

Q. I would like to install a composting toilet. Should I apply to the Department?

A. Not when the proposed use of the humus/composting toilet meets the conditions of the certification for general use, 310 CMR 15.289(3). You do, however, have to obtain a Disposal System Construction Permit from the local approving authority. All other proposed uses of composting toilets must be approved by DEP. [15.289]

Q. Can I use an alternative system, without variances, to make a lot buildable if my lot does not have: a) the required perc rate of 30 minutes per inch or less; b) four feet of naturally occurring soil; and c) the required separation from high groundwater?

A. Not yet. In certifying an alternative system for general use, the Department may determine that the system may be used on lots that do not meet all of the technical requirements of the Code. At this time, however, no technology has been certified for use for new construction, without variances, on a lot that does not meet the Code's perc rates, that does not have at least four feet of

naturally occurring soil, or does not have the necessary separation from high groundwater. For the upgrade of a nonconforming, failed or failing existing system, where a standard Title 5 system or a sewer connection is not feasible, the Department has approved certain alternative systems for use on lots that do not meet the above requirements. These approvals are Remedial Use Approvals. [15.280-15.289]

Q. I would like to use a technology that currently is not used in Massachusetts for a new house. How do I get an approval? I would like to use a technology that currently is not used in Massachusetts for my existing house - how do I obtain approval?

A. For new construction, in accordance with 310 CMR 15.280 - 15.289, the manufacturer of the technology may apply to the Department for piloting or provisional approval, or for general use certification. Or, you may apply to the Department for approval to pilot the system on your property. For existing construction, if you do not have a failed, failing or a nonconforming system, the process is the same. However, if your existing system is failed, failing or nonconforming, and you could not install a conforming system, or connect to a sewer, then you or the manufacturer may apply for remedial use approval. [15.281-15.289]

Q. Where can I get a list of approved technologies?

A. You may obtain a copy of a list of DEP-approved alternative technologies, as well as ones under review for general use certification, by contacting your DEP regional office, or the Boston office. (See addresses and telephone numbers listed below.) You also may obtain copies of the approvals for the alternative systems that have been approved from these offices. The list of alternative systems will be published at least annually in the "Environmental Monitor."

DO YOU STILL HAVE QUESTIONS?

For Title 5 information and referrals, contact:

- DEP Metropolitan Boston/
Northeast Region
10 Commerce Way
Woburn, MA 01801
Service Center 617/932-7677
- DEP Central Region
75B Grove Street
Worcester, MA 01605
Service Center 508/792-7683
- DEP Southeast Region
20 Riverside Drive
Lakeville, MA 02347
Service Center 508/946-2714
- DEP Western Region
436 Dwight Street
State House West, 4th floor
Springfield, MA 01103
Service Center 413/784-1100 x214

**For general information about
alternative technologies, contact:**

- Department of Environmental
Protection
Division of Water Pollution Control
One Winter Street
Boston, MA 02108
617/292-5673

**For training information or to be placed
on the DEP mailing list, call:**

- 800/266-1122

For copies of the regulations, contact:

- State House Bookstore
617/727-2834 or
413/784-1376

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The Importance of New Clean Water Rules

- About one quarter of all homes in Massachusetts have cesspools or septic systems.
- 83 communities in the state have themselves identified some \$400 million worth of sewer construction needs to correct problems with failing cesspools and septic systems.
- Failed cesspools and septic systems are among the major culprits responsible for the fact that forty percent of our lakes and streams and 60 percent of our major harbors and bays aren't clean enough for fishing and swimming.
- Too much phosphorous from these systems is contributing to the weed-choked death of many of our lakes and ponds. In coastal waters, excess nitrogen is the culprit, leading to algae and seaweed blooms that deprive fish and shellfish of oxygen.
- High levels of nitrogen in drinking water can be toxic to babies. Even after treatment in a conventional septic system, household sewage may still contain up to four times the level of nitrogen that's considered safe for drinking water. That's why systems need to be sited carefully so that there are not too many septic systems in the recharge areas of wells, nor are they located too close to drinking water supplies.
- An estimated 90,000 acres of shellfish beds are permanently closed in Massachusetts because of pollution, much of it the result of septic system contamination.

Cesspools

The Problems:

Single component pits do not allow the proper detention of solids nor for the proper distribution of effluent.

Effluent overloads the capacity of the soil to remove harmful bacteria and viruses, to remove phosphorous, and to convert ammonia to less harmful forms of nitrogen.

More prone to surface breakout or backing up through the plumbing.



Septic Systems

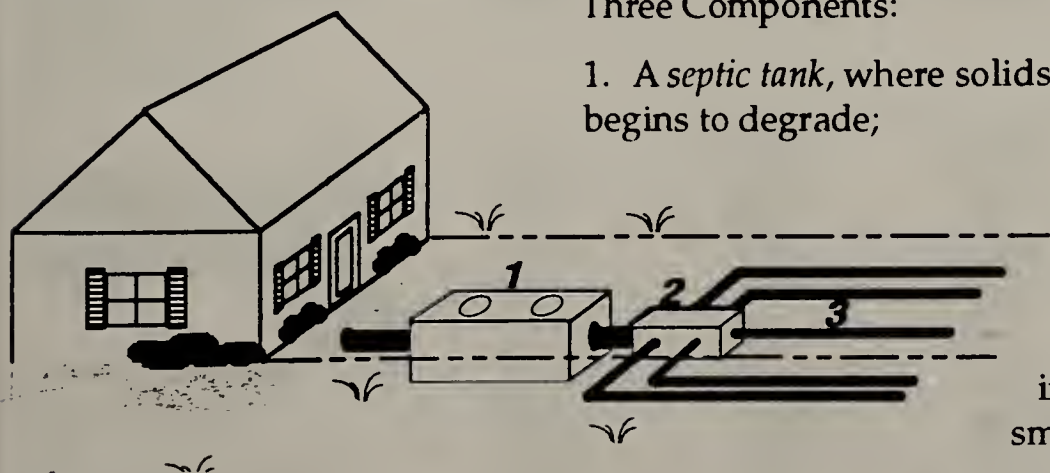
With proper design, construction and maintenance, can last indefinitely.

Three Components:

1. A *septic tank*, where solids can settle and both the solids and effluent begins to degrade;

2.. *distribution box*, which prevents effluent from overloading the soil; and

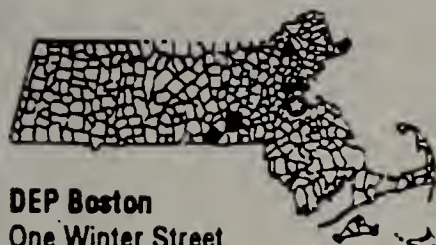
3. a *soil absorption system (leach field)*, which further treats the effluent by partially removing harmful bacteria, viruses, phosphorous, and small amounts nitrogen.



The new Clean Water Rules contain detailed specifications and standards for septic systems that will improve treatment of human sewage. The new rules also allow for alternative technologies that improve or modify traditional septic system designs.

Department of Environmental Protection

Addresses



DEP Boston
One Winter Street
Boston, MA 02108
Telephone: 617-292-5500
Fax: 617-556-1049
TDD: 617-574-6868

William X. Wall Experiment Station[▲] Office of Watershed Management[■]
37 Shattuck Street
Lawrence, MA 01843
Fax: 508-688-0352
Division of Environmental Analysis
Telephone: 508-682-5237
Air Quality Surveillance
Telephone: 508-975-1138

Millbury Training Center[◆]
Route 20
Millbury, MA 01527
Telephone: 508-756-7281
Fax: 508-755-9253
Residuals Sludge Management
Telephone: 508-752-8648
WWT Operator Certification
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DEP Western Region
436 Dwight Street
Suite 402
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DEP Southeast Region
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DEP Northeast Region
10 Commerce Way
Woburn, MA 01801
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